

# BOREHOLE LOG

<b>Project Name:</b> VANDENBERG AFB IRP: OU 2, Site 20, Landfill 1/Drum Disposal Site 1		
<b>Project Number:</b> 01K78601	<b>Borehole No.:</b> 20-MW-21	<b>Sheet</b> 1 of 3
<b>Borehole Location:</b> 2099834.15 N, 5803127.88 E		<b>Elevation and Datum:</b> 445.01 feet MSL
<b>Drilling Contractor:</b> Tri-County Drilling, Inc.	<b>Date Started:</b> 05/28/98	<b>Date Ended:</b> 05/29/98
<b>Drilling Equipment:</b> CME-75	<b>Total Depth:</b> 90 feet	<b>Groundwater Depth:</b> NA
<b>Drilling Method:</b> Hollow Stem Auger	<b>Sampling Method:</b> Split Spoon	<b>Borehole Diameter:</b> 8 inches
<b>Driller:</b> M. Ferguson	<b>Borehole Abandonment:</b> Reamed with 11" auger and completed as 4" monitoring well	
<b>Hammer Information:</b> Manual Hammer. 140-lb and 30-inch drop	<b>Logged By:</b> L. Roché	<b>Checked By:</b> M. Anderson

Depth (feet)	Lithologic Description	Symbol	USCS	Sample	Sample Number	Blow Counts	Field OVA (ppm)	Remarks
	SILTY SAND, brown (10YR 4/3), dry to slightly moist, loose, fine to medium grained, with silt (20%) and trace gravel.		SM				0	
5	CLAYEY SAND, light yellowish brown (2.5Y 6/4) moist, loose, medium grained, nonplastic with clay (25%).		SC				0	Perched zone?
	Same as above, light yellowish brown (2.5Y 6/3), slightly moist, with white, diatomite gravel up to 1/8" (10%).		SC					
10	Same as above, with gravel up to 1/2" (10%).		SC				0	
15	CLAYEY SAND with GRAVEL, light brownish gray (2.5Y, 6/2), slightly moist, loose, medium to coarse grained, weak cementation, with gravel up to 1/2" (30%) and clay (20%).		SC				0	
	CLAYEY GRAVEL, light brownish gray (2.5Y 6/2) slightly moist, loose, subangular to well rounded gravel, with clay lenses (30%) and medium to coarse sand (25%).		GC					
20			CL				0	
	GRAVELLY CLAY, light yellowish brown (2.5Y 6/3), slightly moist, low plasticity, with subangular to subrounded gravel (30%) and medium sand (10%).		CL					Drilling easier.
25	Same as above, subrounded gravel (20%).		CL				0	
30								



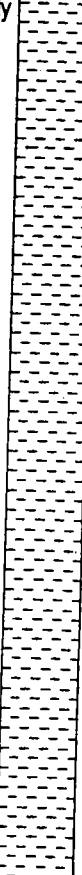
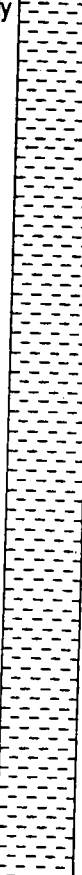
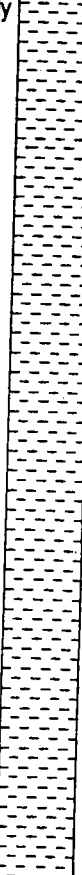
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Borehole No.: 20-MW-21

Sheet 2 of 3

Depth (feet)	Lithologic Description	Symbol	USCS	Sample	Sample Number	Blow Counts	Field OVA (ppm)	Remarks
	Same as above, less sand (10%). Same as above, dense, with angular diatomite gravel (30%).		CL				0	
			CL					
35	SANDY CLAY, olive (5Y 5/4), slightly moist, soft, low to medium plasticity, with medium sand (35%) and subangular to subrounded gravel (5%).		CL					
	Same as above, light olive brown (2.5Y 5/4), medium plasticity, with sand (20%).		CL				0	
40	SILTY CLAY, brown (10YR 4/3), moist, soft, medium plasticity, with sand (5%) and gravel (5%).		CL				0	
45							0	
50	ROCK, dark brown (10YR 3/3), fractured, slightly moist, firm to hard, with trace sand and gravel.		RX				0	Harder drilling. Fairly abrupt contact with fractured, but unweathered, bedrock.
55							0	
60							0	
65							0	
70			RX				0	

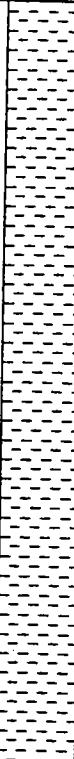
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Sheet 3 of 3

Depth (feet)	Lithologic Description	Symbol	USCS	Sample	Sample Number	Blow Counts	Field OVA (ppm)	Remarks
75	Same as above.		RX				0	
							0	
80							0	
85							0	
90	End of boring at 90 feet below ground surface. Groundwater not encountered. Boring reamed with 11" auger and completed as 4" monitoring well.						0	
95								
100								
105								
110								